IN THE SPECIFICATION:

Paragraph beginning at line 3 of page 1 has been amended as follows:

The present invention concerns a disturbance ~~estimated type~~ estimated-type control system, a gas compressor control system and a method of designing a disturbance estimated type control system and, in particular, relates to a disturbance estimated type control system and a gas compressor control system that are insensitive to parameter variations, such as a heat load variation and rotating speed change, and to a method of designing a the disturbance estimated type control system.

Paragraph beginning at line 18 of page 4 has been amended as follows:

When the control plate 29 is rotated to the right, the notches 29a ~~is~~ are rotated in the right direction, whereby the positions where the compressing chambers 17 are formed also move to the right side and the displacement of the compressing chambers 17 at this point is also reduced. In this way, a discharge capacity is adjustable by rotating the control plate 29.

Paragraph beginning at line 14 of page 8 has been amended as follows:

The present invention has been devised in view of such conventional problems and it is an object of the present invention to provide a disturbance estimated type control system and a gas compressor control system that are insensitive to parameter variations, such as a heat load variation and a rotating speed change, and to a method of designing a disturbance estimated type control system.

Paragraph beginning at line 18 of page 9 has been amended as follows:

A nominal model of a system is prepared utilizing a system identification technology. Then, disturbance estimating means is prepared from ~~am~~ an expanded state equation (expansion system) comprising of a mathematical model (expansion model) taking a disturbance into account with respect to this mathematical model (nominal model).

Paragraph beginning at line 20 of page 29 has been amended as follows:

As described above, according to the present invention, a ~~system~~ control system that is insensitive to a parameter variation caused by a change of a physical property value or the like can be realized with a fixed compensator having a simple structure.

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